

DRAFT
STATEMENT OF WORK

FOR

PROGRAM SUPPORT SERVICES FOR GLOBAL CLIMATE CHANGE:
ENERGY SUPPLY AND INDUSTRY ACTIVITIES

TO

THE OFFICE OF AIR AND RADIATION
CLIMATE PROTECTION PARTNERSHIPS DIVISION
ENERGY SUPPLY AND INDUSTRY BRANCH

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BACKGROUND/CLIMATE CHANGE ACTION PLAN

In the beginning of the 1990's, President Clinton authorized the U.S. Climate Change Action Plan (CCAP) which included nearly 50 specific actions to reduce or sequester emissions of greenhouse gases. Roughly half of these programs are being implemented by EPA's Climate Protection Partnerships Division (CPPD).

The primary goal of these voluntary programs individually and collectively, is to reduce emissions of greenhouse gases and other pollutants, and to simultaneously focus on opportunities to increase efficiency of systems and profitability. Program partners include project developers, state agencies, equipment suppliers, non-governmental organizations, and local governments. EPA requests partners to formalize their commitment to reduce greenhouse gas emissions by signing a memorandum of understanding (MOU). In the MOU, the partner agrees to survey their business or facility and install clean energy technology, or appropriate energy saving technology wherever it is profitable. EPA's clean energy programs work closely with other agencies such as DOE and USDA to meet CCAP commitments.

In addition to CCAP activities, EPA is required to undertake analyses and to collate existing data and other relevant information in response to requirements of the Clean Air Act, the Global Climate Protection Act, and requests from Congress, the Administration and the general public.

ENERGY SUPPLY AND CLIMATE CHANGE

There are significant opportunities to reduce emissions from the energy supply sector, many of them cost-effective. Some opportunities arise from improving the efficiency of energy supply, while others involve replacing carbon-intensive fuels with less-carbon-intensive fuels to generate energy.

A particularly cost-effective example of a clean, efficient energy supply technology is combined heat & power (CHP). CHP units are between 60-80% efficient, a dramatic increase over central-station power plants, which are approximately 33% efficient. In addition, CHP offers power reliability and load distribution benefits to the already overtaxed U.S. power grid. Another group of technologies that offer promising emissions reduction benefits over conventional power technologies are renewable energy technologies. Wind power, geothermal, biomass and solar energy are among the fastest-growing power technologies in the world, and they are becoming increasingly cost-effective. Finally, emerging "distributed" power technologies like fuel cells and gas-powered microturbines offer reliable, high-quality onsite power in a clean, efficient manner.

While offering substantial emissions reductions and economic benefits, these technologies have not been implemented on a wide scale in the U.S. because of financial, informational, and institutional barriers. A major part of this requirement deals with assessing the opportunities for profitable technology applications, analyzing the potential barriers, and undertaking program activities to overcome the identified barriers.

In addition to these clean energy supply technology activities, there is also an opportunity to encourage greenhouse gas reductions through developing high-quality voluntary corporate greenhouse gas (GHG) inventories. Several companies have announced voluntary inventory initiatives in the past few years. However, the implementation status of these activities is unclear. This is due to institutional and informational barriers that prevent the development of a robust inventory of the GHG emissions associated with the entire range of corporate activities. The goal of EPA's work in this area will be to develop transparent methodologies to collect and track high-quality data for a variety of corporate activities into a single, easy-to-use corporate GHG inventory protocol.

WORK AREAS

1. Clean Energy

1.1. Combined Heat and Power: This work area focuses on encouraging industrial and commercial facilities to evaluate and implement CHP projects. EPA's Combined Heat and Power Partnership Program will work with the industrial and commercial sectors, the CHP industry and others to identify and remove obstacles to investments in CHP and to raise awareness of opportunities for profitable investments.

1.2. Distributed Generation: This work area focuses on encouraging clean, high-efficiency distributed power generation with technologies like fuel cells and microturbines. Activities will include breaking down regulatory/permitting barriers, working with state agencies on output-based approaches to air regulation, and evaluation of the performance of existing and new technologies for industrial, commercial and/or residential markets.

1.3. Renewable Energy: This work area focuses on encouraging the development of renewable energy projects, including wind, solar, geothermal, and biomass power. Activities will include breaking down cost barriers by investigating markets for both small-scale and utility-scale renewable technologies, including renewable/natural gas hybrid applications; evaluating barriers to

power transmission, and facilitating the breakdown of permitting/siting barriers.

1.4. Green Power: This work area involves working to encourage greater demand for renewable energy through regulated green pricing programs and competitive green power markets. The Green Power Partnership Program will encourage electricity customers to purchase green power by explaining the variety of benefits that they can realize from green power purchasing, including recognition, quantifiable business benefits, and environmental benefits.

1.5. Other Clean Energy Technologies: This work area seeks to identify opportunities for electric utilities to reduce greenhouse gas emissions through more efficient use of energy, cleaner fuels, fuel switching, or other means.

2. Policy and Environmental Information.

2.1. Policy Outreach: This work area seeks to catalyze clean energy technology development by working with local, state and federal policymakers to help them understand the different approaches they can take to promote these technologies.

2.2. Environmental Information: This work area will build on the existing E-GRID database of air emissions from the electric power sector in the U.S. to provide additional data or services.

2.3. Corporate GHG Inventories: This work area focuses on developing corporate GHG inventory modules, recruiting partners for an EPA voluntary corporate GHG inventory program, and tracking and auditing corporate GHG inventory activities, as well as coordination with other state and federal corporate GHG inventory efforts.

TASK 1-PROGRAM RELATED ACTIVITIES

The Contractor shall perform program related activities, including recruiting, program promotional work, tracking, and

customer service to ensure that existing and new programs developed to reduce greenhouse gas emissions achieve their full potential. The Contractor shall undertake activities on the full-range of EPA programs, by providing services such as recruiting new program participants, tracking and customer service for all programs in all areas covered by the SOW. Contractor personnel, under the technical direction of EPA, shall provide the following tools and services to partners: (1) identify and solicit new partnership agreements, (2) assist existing partners in evaluating their facilities and new technologies, (3) provide computer software packages that enable partners to assess energy options and applications, (4) make available comprehensive project handbook/reference guides, and (5) provide public recognition by distributing ready-to-use promotional materials including the program logos and public-service placement of nonpaid advertising in major magazines and newspaper articles. The Contractor shall obtain approval from the EPA Task Order Project Officer prior to placing nonpaid advertising in newspapers and other media.

1.1. Recruiting. Recruiting is the process by which new volunteers (EPA Partners) are brought into the program. The Contractor shall undertake recruiting tasks for programs under all areas of the SOW. The Contractor shall:

1.1.1. Identify target audiences for specific programs;

1.1.2. Identify key issues or barriers that influence or constrain the decision of various target audiences to participate in a program;

1.1.3. Identify options for overcoming barriers and/or addressing issues;

1.1.4. Develop recruiting tools, including recruiting packages, and information to address barriers;

1.1.5. Make recruiting presentations to prospective partners;

1.1.6. Work with existing partners to encourage peer and general recruiting of new partners;

1.2. Program Work. The Contractor shall ensure that new program participants receive government-furnished background information and support in addressing technical needs in order to easily complete program requirements. The Contractor shall:

1.2.1. Develop new partner or ally packages;

1.2.2. Develop information to aid in the completion of key program activities by partners or allies;

1.2.3. Assess program effectiveness and identify enhancements;

1.2.4. Develop mailings and key communication pieces to address participant needs and improve their awareness or understanding of the program;

1.2.5. Provide technical guidance and troubleshooting in specific technical areas needed by program participants;

1.2.6. Develop materials to address specific technical needs of program participants.

1.3. **Tracking.** In order to ensure that EPA can track progress in recruiting and enacting programs, and effectively organize its contacts with prospective and current program participants, the Contractor shall develop and maintain up-to-date tracking systems for program areas under the SOW. The Contractor shall enhance tracking system efficiency by creating linkages between programs that can share common information. The Contractor shall:

1.3.1. Track progress in recruitment, implementation and emissions reductions achieved for programs in all areas covered by the SOW;

1.3.2. Develop reporting forms to obtain essential information;

1.3.3. Develop databases including contact management databases which allow accurate tracking and follow-up on requests for program information or technical assistance made by phone, meetings, e-mail or other forms of contact, and program databases which track progress of all participants within a program.

1.3.4. Conduct data entry and maintenance functions for program tracking systems;

1.3.5. Review data in tracking systems to identify data gaps or key issues;

1.3.6. Develop reporting formats and prepare summary reports.

1.4. **Customer Service.** The Contractor shall provide customer service by responding promptly to the needs of EPA's program partners. Contractor personnel are required to identify themselves as an EPA Contractor when dealing with the public. The Contractor shall provide a range of customer services to

facilitate the prompt and effective dissemination of information via the mail, internet, electronic and fax-back systems, and hotlines. In all cases, the Contractor shall provide professional, courteous, customer-oriented service in a timely fashion. All actions taken to provide customer service will be entered into an appropriate tracking system. The EPA Task Order Project Officer will be responsible for determining the appropriate management information systems. The Contractor shall:

1.4.1. Distribute information via regular mail or via electronic means such as the Internet and/or fax-based systems;

1.4.2. Distribute mailing materials to program participants or prospects, including the preparation of labels, mass mailings, and targeted mailings of documents, MOUs and other informational materials.

TASK 2-TECHNICAL AND ANALYTICAL WORK

In order to identify new program areas and ensure that current programs are technically sound and reflect the best and most recent technical information, the Contractor shall undertake technical and analytical activities for programs in all areas under the SOW. Technical and economic evaluations must take into consideration all legal and regulatory issues including general business regulations, environmental laws and regulations, safety standards and specifications, financial laws, or other technical rules, regulations, or laws which may have an impact on project feasibility. These activities shall include:

2.1. Measurement Programs. The Contractor shall undertake measurement programs of various emission sources to establish overall levels of emissions, the effectiveness of various mitigation options, and to address areas of scientific uncertainty related to emission factors and key variables which affect emission levels.

2.2. Technological evaluations. The Contractor shall evaluate the technical feasibility of emission reduction options to be implemented by program participants or prospects on a general or site-specific basis. The Contractor shall evaluate the impact of technical issues related to project implementation, such as workability, sustainability, risk and other relevant issues on a project's feasibility. These evaluations may be conducted on a global, national, regional or local basis.

2.3. Economic and Financial Evaluations. The Contractor shall develop economic and financial feasibility evaluations for

emission reduction options to be implemented by program participants or prospects on a general or site-specific basis. The Contractor shall evaluate project economics and financial requirements. The Contractor shall evaluate the impact of such factors as potential trends in energy prices, access to investment capital, trends in interest rates, tax rates, and economic/financial risks on a project's feasibility. These evaluations may be conducted on a global, national, regional or local basis. Financial "pro forma" analyses may be required.

2.4. Market Evaluations. The Contractor shall evaluate market conditions for technologies and techniques that can reduce emissions of greenhouse gases. The Contractor shall evaluate potential markets for clean energy technologies and/or other greenhouse gas mitigation technologies.

TASK 3-LOGISTICAL SUPPORT FOR MEETINGS

The Contractor shall collect and disseminate information through a full range of events, including expert meetings, conferences, colloquia, workshops, training programs and other means of public contacts that are necessary to accomplishing the mission of the scope of work.

The Contractor shall identify and retain appropriate participants, facilitators, speakers, translators, and logistical assistants, provide meeting facilities including supporting equipment, and produce agendas, records, and proceedings. The Contractor shall develop the agendas in conjunction with EPA. The Contractor shall prepare the necessary mailing lists, announcements, and draft press releases to notify potential attendees of scheduled meetings, subject to EPA review and approval.

The Contractor shall provide support for the following:

3.1. Pre-Meeting Tasks:

3.1.1. Prior to the conference or meeting, the Contractor shall identify possible conference sites (if neither Government space nor the EPA conference facilities are available).

3.1.2. The Contractor shall reserve meeting rooms and other areas needed for registration and displays, arrange for copying and audiovisual equipment, microphones, and furniture room setups.

3.1.3. The Contractor shall prepare and distribute all pre-conference or meeting information to the participants, including review drafts, pre-registration forms, informational pamphlets, and agendas.

3.1.4. The Contractor shall provide and convey all materials such as registration packets, name badges and other meeting materials to conference site.

3.2. On-Site Meeting Tasks:

3.2.1. The Contractor shall conduct inspections of the meeting/conference with site personnel to ensure that facilities, furniture, equipment and signs are appropriate;

3.2.2. The Contractor shall conduct registration and distribution of conference and meeting materials;

3.2.3. The Contractor shall provide reporting, transcription, and note taking services, and typing, reproduction and photocopying services;

3.2.4. The Contractor shall provide translation services to and from English to accommodate non-English speaking participants.

3.3. Post-Meeting Tasks:

3.3.1. The Contractor shall distribute draft proceeding summaries for review and comment, and make final revisions to the document taking into account such comments, as well as the Task Order Project Officer's review comments.

The Contractor shall conduct the following types of events under this task:

Technical Workshops: Groups of experts convened to provide "state of knowledge" summaries for EPA on topics related to this SOW.

Outreach Meetings: Public forum for dialogue on EPA's various programs and related topics covered in the Statement of Work. The purpose of these events is to facilitate collection of information and public opinion for EPA regarding program effectiveness and other key issues, and assisting EPA in conducting round tables to improve communication between interested groups.

Recognition Events: Honoring organizations or individuals, both public and private for their participation in the programs covered in the Statement of Work.

Training Programs: Training participants in specific aspects of EPA programs covered in the Statement of Work, as well as in the assessment of program applicability in various parts of the US or internationally, including assessments of emission levels and cost-benefit and other analyses of program attractiveness.

TASK 4-OUTREACH ACTIVITIES

The Contractor shall undertake outreach activities including the development of outreach materials, program summaries and fact sheets, public education materials, public recognition materials, and technical outreach materials targeted at various industry groups. The Contractor shall use a variety of media in disseminating outreach materials, including hard copies; graphics and audio-visual materials for presentations, including computer briefing programs; electronic bulletin boards, home pages, and the Internet; CD-Rom and other interactive computer systems; videos; public recognition materials and non-paid advertisements; and posters and booths suitable for trade-show displays. Examples of specific types of outreach activities include:

4.1. Preparation of Informational and Educational Materials:

The Contractor shall develop informational brochures and other materials for dissemination to the public at large or specific technical groups in the U.S. and elsewhere. The Contractor may be required to translate the material to and from foreign languages. The Contractor shall develop brochures; posters; program documents; program logos; folders; labels; postcards; slides; photographs; newsletters; articles; awards and certificates; buttons, annual reports on programs; outreach presentations; banners; displays, booths and kiosks; maps; billboards; bus/train placards; briefings; and charts.

4.2. Preparation of Graphics and Audio-Visuals: The Contractor shall develop graphics and audio-visual materials for briefings, meetings, workshops, and public presentations, or for general information dissemination. The Contractor shall draft figures; compose and produce 35 mm slides or view graphs, posters, charts, or computer briefing programs with animation; and provide translation. The Contractor will be required to provide quick response (i.e., 24-hour) for multiple revisions.

4.3. Preparation of Electronic Bulletin Boards, Home pages and Internet Systems: The Contractor shall develop electronic bulletin boards, home pages and other similar functions on the Internet for general information dissemination. The Contractor shall provide computer design and programming services; develop various enhancements including hot-links to other similar materials, e-mail links to EPA, and document download

capabilities; provide frequent updates to keep material current; and assess and implement innovative approaches to using the Internet and/or similar systems as a program outreach tool. The information that will be posted is general program information that is available to the general public.

4.4. CD-ROM and/or Other Interactive Computer Systems: The Contractor shall develop CD-ROM or other interactive computer systems to convey key general or technical information about program areas covered in the Statement of Work.

4.5. Videos: The Contractor shall develop videotapes for the general public or more technical audiences on programs and technologies covered in the Statement of Work. The Contractor shall develop concepts and scripts; prepare story boards; film and edit; and perform any other activities necessary to prepare and distribute high-quality video products.

4.6. Public Recognition Materials and Advertisements: The Contractor shall develop high-quality public recognition materials and advertisements suitable for placement in EPA documents, conference proceedings, trade journals, or other similar materials. The Contractor shall create, design, layout, and produce materials. The Contractor shall coordinate the placement of non-paid advertisements.

4.7. Posters and Trade-Show Booth Materials: The Contractor shall provide posters, computer demonstrations, or other materials for display in booths or on tables at trade shows for the program areas covered in the Statement of Work. The Contractor shall develop concepts; design booth or table layout; develop professional posters and computer demonstrations, automatic slide shows or other materials as part of the booth or table; and prepare booths or tables suitable for installation in exhibition areas at conferences or other public gatherings.

TASK 5--ANALYTICAL MODELING ACTIVITIES

The Contractor shall provide analytical modeling for a variety of purposes, including assessment of emission reduction methods (in terms of technical, economic or financial impacts) on a global, national, regional, or site-specific basis. The Contractor shall conduct analytical modeling of potential penetration of clean energy technologies in the U.S. electric sector. The Contractor

shall develop, refine and use a range of analytical modeling tools related to all program areas under the SOW. The Contractor shall perform modeling efforts such as the following: input-output models, simulation models, discounted cash-flow models, electricity dispatch models, or other common model types. The Contractor shall compile and manage data bases on climate change and related multimedia environmental issues. The Contractor shall validate, and run mathematical models that can be used to analyze physical-chemical processes, simulate biological responses, analyze economic systems and assess options for mitigation, adaptation, or other strategies, and track progress of actions taken to mitigate or adapt to climate change. In addition, the Contractor shall review models developed by others and analyze results in terms of accuracy of assumptions and quality of analysis.

Specific modeling activities include:

5.1. Emission Reduction Modeling: The Contractor shall evaluate the applicability of available and emerging technologies to cost-effectively reduce emissions from various sources. The Contractor shall estimate the penetration of such technologies on a global, regional, national, local and/or site-specific basis.

5.2. Energy Market Modeling: The Contractor shall conduct modeling supplies of different forms of energy, especially binding constraints, over time. The Contractor shall determine the end use demands on desegregated levels of vintages and equipment cohorts and sources of variation in end-use demand. The Contractor shall perform modeling stocks and flows of capital equipment over time in a vintaging framework. The Contractor shall perform statistical and econometric modeling and develop novel approaches and solutions to statistical problems. The Contractor shall develop models that explore the implications of regulatory actions, particularly the resulting economic impacts and incentives.

TASK 6-SITE-SPECIFIC FEASIBILITY AND ENGINEERING WORK

The Contractor shall provide site-specific feasibility and engineering work on greenhouse gas reduction opportunities being promoted by programs under the SOW. The Contractor shall determine the applicability of available or emerging technologies to reduce greenhouse gas emissions under site-specific conditions in the United States or abroad. The Contractor shall cover the

following topics: technical feasibility; engineering requirements; costs and revenues; project implementation issues (such as permitting, legal or regulatory issues); and financing issues. Analyses may be undertaken in the United States or internationally.

The Contractor shall evaluate site-specific conditions related to various emissions of greenhouse gases and identify sites with strong potential to profitably reduce emissions. The Contractor shall evaluate the applicability of common technologies and techniques under different conditions. The Contractor shall analyze the potential to adapt existing technologies at specific sites and shall assess the applicability of available technologies and techniques for maximizing emission reductions. The Contractor shall evaluate issues involving the application of available and emerging technologies under the technical and institutional conditions of the site or sites being investigated.